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EXAMINER
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COUGHLAN, PETER D

ART UNIT	PAPER NUMBER
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2129

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PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/596,195	<b>Applicant(s)</b> ROTTM, SHRAGA	
	<b>Examiner</b> PETER COUGHLAN	<b>Art Unit</b> 2129	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 02 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2 and 4-27 is/are rejected.
- 7) ☒ Claim(s) 3 and 28-30 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 6/2/2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## Detailed Action

1. Claims 1-30 are pending in this application.

2. Examiner's Comment:

It is known within the art of medical diagnostic and/or procedures that time (or date, age or similar equivalents) are inherently connected. A date of a physical exam, X-rays, surgery or prescriptions are always recorded. From birth till death, health records inherently have a time period recorded with them.

### ***Specification Objection***

3. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: Claim 27 recites, 'reverse feature extraction.' This is not supported within the specification.

Claims 6 and 22 recite a 'genetic counseling' system. This is not supported within the specification.

Claim 15 recites a 'weighted analysis.' This is not supported by the specification.

4. The following guidelines illustrate the preferred layout for the specification of a utility application. **These guidelines are suggested for the applicant's use.** The examiner notes that the originally filed specification does not appear to include a "Brief Description of the Invention" section of the specification.

As provided in 37 CFR 1.77(b), the specification of a utility application should include the following sections in order. Each of the lettered items should appear in upper case, without underlining or bold type, as a section heading. If no text follows the section heading, the phrase "Not Applicable" should follow the section heading:

- (a) TITLE OF THE INVENTION.
- (b) CROSS-REFERENCE TO RELATED APPLICATIONS.
- (c) STATEMENT REGARDING FEDERALLY SPONSORED RESEARCH OR DEVELOPMENT.
- (d) THE NAMES OF THE PARTIES TO A JOINT RESEARCH AGREEMENT.
- (e) INCORPORATION-BY-REFERENCE OF MATERIAL SUBMITTED ON A COMPACT DISC.
- (f) BACKGROUND OF THE INVENTION.
  - (1) Field of the Invention.
  - (2) Description of Related Art including information disclosed under 37 CFR 1.97 and 1.98.
- (g) BRIEF SUMMARY OF THE INVENTION.
- (h) BRIEF DESCRIPTION OF THE SEVERAL VIEWS OF THE DRAWING(S).
- (i) DETAILED DESCRIPTION OF THE INVENTION.
- (j) CLAIM OR CLAIMS (commencing on a separate sheet).
- (k) ABSTRACT OF THE DISCLOSURE (commencing on a separate sheet).
- (l) SEQUENCE LISTING (See MPEP § 2424 and 37 CFR 1.821-1.825. A "Sequence Listing" is required on paper if the application discloses a nucleotide or amino acid sequence as defined in 37 CFR 1.821(a) and if the required "Sequence Listing" is not submitted as an electronic document on compact disc).

***Claim Rejections - 35 USC § 112, 2<sup>nd</sup> Paragraph***

5. Claim 22 is objected to under 37 CFR 1.75(c), as being of improper dependent form for failing to further limit the subject matter of a **previous claim**. Applicant is

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required to cancel the claim(s), or amend the claim(s) to place the claim(s) in proper dependent form, or rewrite the claim(s) in independent form. Note, originally filed claim 22 depends from claim 24 rather than a preceding claim.

### ***Claim Rejections - 35 USC § 102***

6. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 4, 5, 18, 21 and 26 are rejected under 35 U.S.C. 102(b) (hereinafter referred to as **Rottem**) being anticipated by Rottem, U. S. Patent 6032678.

#### **Claim 1**

Rottem discloses at least one database of pregnancy related health data including data representing time oriented information about pregnancy health complications (**Rottem**, c7:16-25, fig 2, fig 6; 'Database' of applicant maps to 'database' of Rottem. 'Pregnancy related health data' of applicant maps to 'tubal pregnancy as it effects an organ' of Rottem. Time related data of applicant maps to 'fetal information arranged by organ system and time-oriented development stage' of Rottem.); at least one input for inputting diagnostic and screening data, including time oriented information about said diagnostic and screening data (**Rottem**, abstract, fig 6; Input of applicant

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maps to 'imaging tools' of Rottem. 'Inputting diagnostic' of applicant maps to 'enhance reliability of diagnosis' of applicant. 'Time oriented information' of applicant maps to time oriented development stage of Rottem.); and at least one indicator for reporting a decision as a function of the inputted diagnostic and screening data and said pregnancy related health data. (**Rottem**, c2:40-47; 'Reporting a decision as a function of the inputted diagnostic' of applicant maps to 'it is an object of the present invention to provide a multi-tier diagnostic and treatment' of Rottem.)

#### Claim 2

Rottem discloses a plurality of time oriented data menus, said data menus comprising categorically defined pregnancy related health conditions, said data menus being organized as a function of the pregnancy time period, said health complications being classified in said data menus. (**Rottem**, fig 6; Time related data of applicant maps to the column on the right side of figure 6 of Rottem. 'Categorically defined pregnancy related health conditions' of applicant maps to the top row of figure 6 of Rottem. 'Data menus being organized as a function of the pregnancy time period, said health complications being classified in said data menus' of applicant maps to the grid and the contents of the grid between the right hand column and the top row of Rottem.)

#### Claim 4

Rottem discloses data representing the earliest known time for detection of the health complication; or data representing a course of action regarding the complication

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(**Rottem**, c2:55 through c3:26; 'Data representing a course of action regarding the complication ' of applicant maps to means for providing to the diagnostician, **information regarding treatment or repair protocols for a diagnosis** with a probability above a pre-set probability level' of Rottem.) data representing the likelihood of such complication; or data representing the class of a complication. (**Rottem**, c2:55 through c3:26; 'Data representing the likelihood of such complication' of applicant maps to means for providing to the diagnostician, information regarding treatment or repair protocols for a diagnosis with a **probability above a pre-set probability level**' of Rottem.)

#### Claim 5

Rottem discloses a diagnostic and screening tool (**Rottem**, abstract, c2:60-67; Diagnostic and screening tool of applicant maps to diagnostic tool of Rottem. Screening tool of applicant maps to screening device of Rottem.); a diagnostic and screening test; or information gathered from a person reporting on a pregnancy; or a report on the patient. (**Rottem**, c1:17-28; Screening test of applicant maps to screening test of Rottem.)

#### Claim 18

Rottem discloses an operating system comprising an input for data relating to mother's condition (**Rottem**, abstract; Input data of applicant maps to 'input image' of Rottem.) and the fetus's condition wherein said data about the fetus includes the

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gestational age of the fetus. (**Rottem**, c1:17-28; 'Fetus condition' of applicant maps to sonogram of an unborn child of Rottem.)

#### Claim 21

Rottem discloses wherein the system is embedded into a diagnostic and screening device. (**Rottem**, abstract, c2:60-67; Diagnostic and screening tool of applicant maps to diagnostic tool of Rottem. Screening tool of applicant maps to screening device of Rottem.)

#### Claim 26

Rottem discloses wherein the inputted diagnostic and screening data includes data inputted in response to a prompt generated by said system. (**Rottem**, c1:29-40; Inputting data in response to a prompt generated by the system of applicant maps to 'direct interviews with the patient of Rottem.)

### ***Claim Rejections - 35 USC § 103***

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains.

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Patentability shall not be negated by the manner in which the invention was made.

Claims 9, 13, 15, 17 and 25 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rottem in view of Brady. (U. S. Patent Publication 20030144976; referred to as **Brady**)

#### Claim 9

Rottem does not disclose expressly an intelligent agent further comprising at least one algorithmic rule adapted to apply to data inputted into the intelligent agent, said rule designed to produce at least one decision about a pregnancy case.

Brady discloses an intelligent agent further comprising at least one algorithmic rule adapted to apply to data inputted into the intelligent agent, said rule designed to produce at least one decision about a pregnancy case. (**Brady**, ¶0034; 'Intelligent agent' of applicant maps to 'intelligent agent' of Brady. 'Produce one decision' of applicant maps to 'software agents which can reprocess the data' of applicant.) Rottem and Brady are analogous art because they form same field of endeavor of interpretation of input data for medical diagnosis. At the time of the invention it would have been obvious to a person of ordinary skill in the art using intelligent agent and the web. The suggestion/motivation for doing so would have been reducing human input and not being isolated to a specific location. Therefore, it would have been obvious to combine Brady with Rottem for the benefit of reducing user input and be Internet assessable to obtain the invention as specified in claim 9.

Claim 13

Rottem discloses screening data and indicate the probability of the presence or absence of a pregnancy related health complication. (**Rottem**, c2:55 through c3:26; 'Indicate the probability of the presence' of applicant maps to means for providing to the diagnostician, information regarding treatment or repair protocols for a diagnosis with a **probability above a pre-set probability level**' of Rottem.)

Rottem does not disclose expressly the intelligent agent, said agent being configured to accept said inputted diagnostic.

Brady discloses the intelligent agent, said agent being configured to accept said inputted diagnostic. (**Brady**, ¶0034; 'Intelligent agent' of applicant maps to 'intelligent agent' of Brady. 'Produce one decision' of applicant maps to 'software agents which can reprocess the data' of applicant.) Rottem and Brady are analogous art because they form same field of endeavor of interpretation of input data for medical diagnosis. At the time of the invention it would have been obvious to a person of ordinary skill in the art using intelligent agent and the web. The suggestion/motivation for doing so would have been reducing human input and not being isolated to a specific location. Therefore, it would have been obvious to combine Brady with Rottem for the benefit of reducing user input and be Internet assessable to obtain the invention as specified in claim 13.

Claim 15

Rottem discloses a weighted analysis as a function the intelligent agent indicating the presence, absence or probability of the presence or absence of said complication (**Rottem**, c2:21-36; 'Presence, absence or probability' of applicant maps to 'probability of correctness' of Rottem.); and a future action to be taken with respect to said weighted analysis. (**Rottem**, c2:55 through c3:26; Future action to be taken with respect to said weighted analysis of applicant maps to 'means for providing to the diagnostician, information regarding treatment or repair protocols for a diagnosis with a probability above a pre-set probability level' of Rottem.)

#### Claim 17

Rottem discloses wherein the system is configured to issue a report advisory report on future actions to be taken. (**Rottem**, c2:55 through c3:26; Report advisory report on future actions to be taken of applicant maps to 'means for providing to the diagnostician, information regarding treatment or repair protocols for a diagnosis with a probability above a pre-set probability level' of Rottem.)

#### Claim 25

Rottem does not disclose expressly wherein the system is accessible online.

Brady discloses wherein the system is accessible online. (**Brady**, ¶0033; The system is accessible online of applicant maps to the use of the internet allows for east accessibility of Brady.) Rottem and Brady are analogous art because they form same field of endeavor of interpretation of input data for medical diagnosis. At the time of the

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invention it would have been obvious to a person of ordinary skill in the art using intelligent agent and the web. The suggestion/motivation for doing so would have been reducing human input and not being isolated to a specific location. Therefore, it would have been obvious to combine Brady with Rottem for the benefit of reducing user input and be Internet assessable to obtain the invention as specified in claim 25.

Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rottem in view of Filler. (U. S. Patent Publication 20010051881; referred to as **Filler**)

#### Claim 6

Rottem does not disclose expressly an ultrasound pattern recognition device; a genetic testing device; a genetic counseling system; a device for biochemical testing; or a magnetic resonance device.

Filler discloses an ultrasound pattern recognition device (**Filler**, ¶0023; Ultrasound pattern recognition device of applicant maps to ultrasound or Filler.); a genetic testing device (**Filler**, ¶0039; Genetic testing of applicant maps to genetic data of Filler.); a genetic counseling system (**Filler**, ¶0081; Counseling system of applicant maps to 'reports which can be used to consult with and counsel the patient' of Filler.); a device for biochemical testing (**Filler**, ¶0039; Biochemical testing of applicant maps to lab test of Filler.); or a magnetic resonance device. (**Filler**, ¶0023; Magnetic resonance device of applicant maps to MRI of Filler.) Rottem and Filler are analogous art because

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they form same field of endeavor of medical diagnosis. At the time of the invention it would have been obvious to a person of ordinary skill in the art using multiple diagnosing methods. The suggestion/motivation for doing so would have been combining multiple techniques. Therefore, it would have been obvious to combine Filler with Rottem for the benefit of using one system for multiple diagnosing methods and combining the results to obtain the invention as specified in claim 6.

#### Claim 7

Rottem does not disclose expressly a genetic test; an ultrasound test; or a biochemical test.

Filler discloses a genetic test (**Filler**, ¶0039; Genetic testing of applicant maps to genetic data of Filler.); an ultrasound test (**Filler**, ¶0023; Ultrasound of applicant maps to ultrasound or Filler.); or a biochemical test. (**Filler**, ¶0039; Biochemical test of applicant maps to lab test of Filler.) Rottem and Filler are analogous art because they form same field of endeavor of medical diagnosis. At the time of the invention it would have been obvious to a person of ordinary skill in the art using multiple diagnosing methods. The suggestion/motivation for doing so would have been combining multiple techniques. Therefore, it would have been obvious to combine Filler with Rottem for the benefit of using one system for multiple diagnosing methods and combining the results to obtain the invention as specified in claim 7.

Claims 8, 11 and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rottem in view of Sundari. ('Computerization in obstetrics and gynecology – An expert system approach'; referred to as **Sundari**)

Claim 8

Rottem does not disclose expressly information from a patient interview; information provided by someone other than patient; or information volunteered by a patient..

Sundari discloses information from a patient interview; information provided by someone other than patient; or information volunteered by a patient. (**Sundari**, 1.56; Information about a patient of applicant maps to 'LOTS OF DETAILS' of Sundari. Where the information came from, for example a patient interview, someone other than the patient or volunteered by a patient is nonfunctional descriptive.) Rottem and Sundari are analogous art because they form same field of endeavor of obstetrics. At the time of the invention it would have been obvious to a person of ordinary skill in the art of inputting general information. The suggestion/motivation for doing so would have been using computers for improved accuracy and faster informational retrieval. Therefore, it would have been obvious to combine Rottem with Sundari for the benefit of using a computer based system for improved speed to obtain the invention as specified in claim 8.

Claim 11

Rottem does not disclose expressly wherein the report on the patient comprises:  
a patient history.

Sundari discloses wherein the report on the patient comprises: a patient history.  
(**Sundari**, 1.56; Patient history of applicant maps to past medical history of Sundari.)  
Rottem and Sundari are analogous art because they form same field of endeavor of obstetrics. At the time of the invention it would have been obvious to a person of ordinary skill in the art of inputting general information. The suggestion/motivation for doing so would have been using computers for improved accuracy and faster informational retrieval. Therefore, it would have been obvious to combine Rottem with Sundari for the benefit of using a computer based system for improved speed to obtain the invention as specified in claim 11.

#### Claim 14

Rottem does not disclose expressly system comprising a computer executed program for categorically indexing: inputted diagnostic and screening data; and database data into any of said at least one said menus.

Sundari discloses system comprising a computer executed program for categorically indexing: inputted diagnostic and screening data; and database data into any of said at least one said menus. (**Sundari**, 1.56; 'Database data' of applicant maps to 'LOTS OF DETAILS' of Sundari. Diagnostic data of applicant maps to 'ultrasound details' of Sundari. Screening data of applicant maps to 'past obstetric history' of Sundari.) Rottem and Sundari are analogous art because they form same field of

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endeavor of obstetrics. At the time of the invention it would have been obvious to a person of ordinary skill in the art of inputting general information. The suggestion/motivation for doing so would have been using computers for improved accuracy and faster informational retrieval. Therefore, it would have been obvious to combine Rottem with Sundari for the benefit of using a computer based system for improved speed to obtain the invention as specified in claim 14.

Claims 12, 22, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rottem in view of Ni. (U. S. Patent Publication 20030138426; referred to as **Ni**)

#### Claim 12

Rottem does not disclose expressly a scaled plotting tool for plotting said inputted diagnostic and screening data, wherein the decision is a function of the plotted data.

Ni discloses a scaled plotting tool for plotting said inputted diagnostic and screening data, wherein the decision is a function of the plotted data. (**Ni**, ¶0317; Scaled plotting tool wherein a decision is a function of the plotted data of applicant maps to 'The affinity of the antibody of interest for a particular antigen and the binding off-rates can be determined from the data by scatchard plot analysis' of Ni.) Rottem and Ni are analogous art because they form same field of endeavor of diagnosis of the human

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ailments. At the time of the invention it would have been obvious to a person of ordinary skill in the art of using the human genome and plotting techniques. The suggestion/motivation for doing so would have been to generate possible outcomes based on decision functions. Therefore, it would have been obvious to combine Ni with Rottem for the benefit of using a computer based system for improved speed to obtain the invention as specified in claim 12.

#### Claim 22

Rottem discloses wherein the diagnostic and screening device comprises any one of: an ultrasound pattern recognition device; a genetic testing device; a genetic counseling system; a device for biochemical testing; or a magnetic resonance device. (**Rottem**, c1:46-64; Ultrasound pattern recognition device of applicant maps to images resulting from the use of ultrasound waves (sonograms)' of Rottem.)

#### Claim 23

Rottem does not disclose expressly wherein the at least one database of pregnancy health complications comprises a database comprising the human genome.

Ni discloses wherein the at least one database of pregnancy health complications comprises a database comprising the human genome. (**Ni**, ¶0532, ¶0859; Pregnancy health complications' of applicant maps to 'pregnancy complications' of Ni. Database of the human genome of applicant maps to 'database' and 'human genome' of Ni.) Rottem and Ni are analogous art because they form same field of endeavor of

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diagnosis of the human ailments. At the time of the invention it would have been obvious to a person of ordinary skill in the art of using the human genome and plotting techniques. The suggestion/motivation for doing so would have been to generate possible outcomes based on decision functions. Therefore, it would have been obvious to combine Ni with Rottem for the benefit of using a computer based system for improved speed to obtain the invention as specified in claim 23.

#### Claim 24

Rottem does not disclose expressly wherein the system comprising the at least one database of pregnancy health complications is operatively connected to the database comprising the human genome.

Ni discloses wherein the system comprising the at least one database of pregnancy health complications is operatively connected to the database comprising the human genome. (Ni, ¶0532, ¶0859, ¶0057; Pregnancy health complications' of applicant maps to 'pregnancy complications' of Ni. Database of the human genome of applicant maps to 'database' and 'human genome' of Ni. 'System' of applicant maps to 'expert system' of Ni.) Rottem and Ni are analogous art because they form same field of endeavor of diagnosis of the human ailments. At the time of the invention it would have been obvious to a person of ordinary skill in the art of using the human genome and plotting techniques. The suggestion/motivation for doing so would have been to generate possible outcomes based on decision functions. Therefore, it would have been

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obvious to combine Ni with Rottem for the benefit of using a computer based system for improved speed to obtain the invention as specified in claim 24.

Claims 19, 20 and 27 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rottem in view of Neumann. ('Fetal Biometry and Intrauterine Growth Retardation'; referred to as **Neumann**)

#### Claim 19

Rottem does not disclose expressly wherein the gestational age is established by a diagnostic and screening method.

Neumann discloses wherein the gestational age is established by a diagnostic and screening method. (**Neumann**, p414, c1, abstract; Gestation age of applicant maps to gestation age of Neumann. Diagnostic and screen method of applicant maps to 'fetal biometry' of Neumann.) Rottem and Neumann are analogous art because they form same field of endeavor of fetal biometer. At the time of the invention it would have been obvious to a person of ordinary skill in the art of using two references which use fetal biometrics. The suggestion/motivation for doing so would have been to use details of Neumann which as assumed in Rottem. Therefore, it would have been obvious to combine Neumann with Rottem for the benefit of obtaining clearer detail of fetal biometrics obtain the invention as specified in claim 19.

Claim 20

Rottem does not disclose expressly wherein the diagnostic and screening method comprises an ultrasonographic method, said ultrasonographic method including fetal biometer.

Neumann discloses wherein the diagnostic and screening method comprises an ultrasonographic method, said ultrasonographic method including fetal biometer.

(**Neumann**, title & abstract; Ultrasonographic method of applicant maps to ultrasound of Neumann. Fetal biometer of applicant maps to 'fetal biometry' of Neumann.) Rottem and Neumann are analogous art because they form same field of endeavor of fetal biometer. At the time of the invention it would have been obvious to a person of ordinary skill in the art of using two references which use fetal biometrics. The suggestion/motivation for doing so would have been to use details of Neumann which as assumed in Rottem. Therefore, it would have been obvious to combine Neumann with Rottem for the benefit of obtaining clearer detail of fetal biometrics obtain the invention as specified in claim 20.

Claim 27

Rottem does not disclose expressly wherein the system is comprises feature extraction or reverse feature extraction.

Neumann discloses wherein the system is comprises feature extraction or reverse feature extraction. (**Neumann**, p416, table 2; Feature extraction of applicant maps to the example of 'femoral length' of Neumann.) Rottem and Neumann are

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analogous art because they form same field of endeavor of fetal biometer. At the time of the invention it would have been obvious to a person of ordinary skill in the art of using two references which use fetal biometrics. The suggestion/motivation for doing so would have been to use details of Neumann which as assumed in Rottem. Therefore, it would have been obvious to combine Neumann with Rottem for the benefit of obtaining clearer detail of fetal biometrics obtain the invention as specified in claim 27.

Claims 10 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Rottem and Brady as applied to claims 9, 13, 15, 17 and 25 above, and further in view of Ni. (U. S. Patent Publication 20030138426; referred to as **Ni**)

#### Claim 10

Rottem and Brady do not disclose expressly scheduling at least one action to be taken with respect to the complication, said action including an action for screening for at least one said complication; treating said complication.

Ni discloses scheduling at least one action to be taken with respect to the complication, said action including an action for screening for at least one said complication; treating said complication. (**Ni**, ¶0027; treating said complication of applicant maps to 'conditions may be treated' of Ni. One action to be taken in respect to the complication of applicant maps to 'inflammatory conditions may be treated...' of Ni.) Rottem, Brady and Neumann are analogous art because they form same field of

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endeavor of diagnostic and interpretation. At the time of the invention it would have been obvious to a person of ordinary skill in the art of using the human genome for diagnostic abilities. The suggestion/motivation for doing so would have been to for genetic reasons for ailments. Therefore, it would have been obvious to combine Ni with Rottem and Brady for the benefit of obtaining clearer detail with more information which could pertain to diagnostic abilities obtain the invention as specified in claim 10.

#### Claim 16

Rottem and Brady do not disclose expressly wherein the future action is: at least one screening for at least one health complication; or at least one treatment for at least one health complication.

Ni discloses wherein the future action is: at least one screening for at least one health complication; or at least one treatment for at least one health complication. (**Ni**, ¶0027, ¶0032; Screening of applicant maps to 'screen method' of Ni. Treating said complication of applicant maps to 'conditions may be treated' of Ni. One action to be taken in respect to the complication of applicant maps to 'inflammatory conditions may be treated...' of Ni.) Rottem, Brady and Neumann are analogous art because they form same field of endeavor of diagnostic and interpretation. At the time of the invention it would have been obvious to a person of ordinary skill in the art of using the human genome for diagnostic abilities. The suggestion/motivation for doing so would have been to for genetic reasons for ailments. Therefore, it would have been obvious to combine Ni with Rottem and Brady for the benefit of obtaining clearer detail with more

information which could pertain to diagnostic abilities obtain the invention as specified in claim 16.

### ***Conclusion***

8. The prior art of record and not relied upon is considered pertinent to the applicant's disclosure.

Search terms – IEEE fetal, expert systems

-‘FOETOS: An expert system for fetal assessment’: Alonso-Betanzos

-‘Detecting the wall motion of the fetal heart within ultrasound images’: Gibson

-‘A methodology for evaluation of boundary detection algorithms on medical images’: Chalana

Text co-authored by inventor

-‘Transvaginal Sonography’: Timor-Tritsch

9. Claims 1, 2 and 4-27 are rejected.

### ***Allowable Subject Matter***

10. Claims 3 and 28-30 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

If the applicant should choose to rewrite the independent claims to include the limitations recited in either of claims 3 and 28-30, the applicant is encouraged to amend the **title of the invention** such that it is descriptive of the invention as claimed as required by sec. **606.01** of the **MPEP**. Furthermore, the **Summary of the Invention** and the **Abstract** should be amended to bring them into harmony with the allowed claims as required by paragraph 2 of **sec. 1302.01** of the **MPEP**.

### ***Correspondence Information***

11. Any inquiry concerning this information or related to the subject disclosure should be directed to the Examiner Mr. Peter Coughlan, whose telephone number is (571) 272-5990. The Examiner can be reached on Monday through Friday from 7:15 a.m. to 3:45 p.m.

If attempts to reach the Examiner by telephone are unsuccessful, the Examiner's supervisor Mr. Donald Sparks can be reached at (571) 272-4201. Any response to this office action should be mailed to:

Commissioner of Patents and Trademarks,  
Washington, D. C. 20231;

Hand delivered to:

Receptionist,  
Customer Service Window,

Art Unit: 2129

Randolph Building,

401 Dulany Street,

Alexandria, Virginia 22313,

(located on the first floor of the south side of the Randolph Building);

or faxed to:

(571) 272-3150 (for formal communications intended for entry.)

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/P. C./

Examiner, Art Unit 2129

1/13/2011

/Donald Sparks/

Supervisory Patent Examiner, Art  
Unit 2129

Application/Control Number: 10/596,195  
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